

ABSTRACT OF THE DISCLOSURE

DYNAMIC QUEUE UTILIZATION

A switch for switching packets in a network. The switch includes port cards which send packets to and receive packets from the network. The switch includes fabrics connected to the port cards for switching portions of the packets. Each fabric has queues in which portions of packets are stored. Each queue corresponds to one of the port cards. Each fabric has a determining mechanism which determines which queue the portions of the packet should be placed in. The detecting mechanism is dynamic to reflect changes in port card quantity without any change in connection data of the packets. A method for switching packets in a network. The method includes the steps of receiving packets at port cards of a switch from the network. Then there is the step of sending portions of the packets as stripes to a respective number of fabrics of the switch. Next there is the step of storing the respective portions of packets in queues of the fabric corresponding to port cards the portions of the packets are to be sent to from the respective fabrics. Then there is the step of sending the portions of packets as stripes to the port card. Next there is the step of transmitting packets from the port card to the network. Then there is the step of changing the number of port cards in the switch. Next there is the step of receiving more packets at the port cards. Then there is the step of sending portions of the more packets to the number of the fabrics after the number of the fabrics has changed. Then there is the step of storing the portions of the more packets in the queues

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corresponding to the port cards the portions of the packets are to be sent to without any change to connection data in the packets.